

REMARKS

Claims 1-20 are pending in the application. Claims 1, 7 and 14 were amended. Support for the amendment may be found throughout the specification and drawings. Attached hereto is a marked up version titled "Version with Markings to Show Changes Made."

Claim Rejections

The Examiner rejected Claims 1-4 and 6-20 under 35 U.S.C. §102(b) as being anticipated by Tosaki, U.S. Patent No. 6,272,020. The Examiner also rejected Claim 5 under 35 U.S.C. §103(a) as being unpatentable over Tosaki in view of Hussain, U.S. Patent No. 6,344,684. The Applicants respectfully disagree.

However, the Applicants have amended the claims to indicate that while the set of contacts of first configuration and second configuration have a similar size, the arrangement of functions of the first configuration and the second configuration are different, which is not disclosed, taught or suggested by the submitted references. Through changing the arrangement of the contacts, a preexisting chip may be utilized for testing and the like of a circuit board, even a chip of the same size of contact area of the circuit board, but having a different arrangement of pins. See FIGS. 1A, 1B, & 3F and related description. Arrangement pertains to pins and the corresponding functionality of the pins with respect to each other, as shown in the following excerpt and shown in FIGS. 1A and 1B:

In this way, an integrated circuit may have a configuration depending on the arrangement of contacts and corresponding functions of the arranged contacts. For instance, a contact 106 may be configured to provide a first function in a first configuration. However, in certain instances it may be desirable to utilize the integrated circuit with a device having a second configuration, which may be incompatible with the first configuration.

For example, as shown in FIG. 1B, a circuit board 110 includes a substrate 112 having a plurality of contacts 114. The contacts 114 are suitable for providing an electrical pathway and contact with contacts 104 disposed on an integrated circuit 100 (FIG. 1A). However, the configuration of the circuit board 110 is different from the integrated circuit 100. For example, a contact 106 (FIG. 1A) having a first function may not be arranged with a corresponding contact 116 having the first function of the circuit board 110. For

instance, such as if the integrated circuit was arranged directly on a circuit board so that the corresponding functions did not align. Thus, contacts of the first configuration are out of position with contacts of a second configuration of the circuit board, making the circuit board and integrated circuit incompatible as configured.

Application, Page 6, Lines 9-24.

Therefore, the positioning of pins and the corresponding functions are different in the first configuration and second configuration, as claimed. In the Tosaki reference, the size of the contact area is changed so that a capacitor may be included. There is no teaching or suggestion in the Tosaki reference for changing the arrangement of the connections in a configuration while maintaining size of the contact area as claimed. Therefore, it is respectfully submitted that a *prima facie* showing of anticipation has not been established.

Claims 2-6, 8-13 and 15-20 are believed to be allowable based on dependence from an allowable claim.

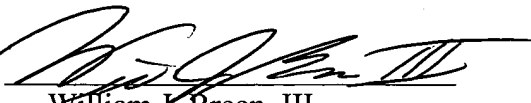
Withdrawal of the rejections is respectfully requested.

CONCLUSION

In light of the forgoing, reconsideration and allowance of the claims is earnestly solicited.

Respectfully submitted,
LSI Logic,

Dated: November 22, 2002

By: 
William J. Breen, III
Reg. No. 45,313

SUITER & ASSOCIATES PC
14301 FNB Parkway, Suite 220
Omaha, NE 68154
(402) 496-0300 telephone
(402) 496-0333 facsimile

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend the claims as follows:

2. (Amended) A converter device, comprising:
a board having a first side and a second side, wherein
the first side includes a first set of contacts suitable for electrically
contacting an integrated circuit having a first configuration; and
the second side includes a second set of contacts suitable for electrically
contacting a circuit board having a second configuration, wherein
the second set of contacts are communicatively coupled to the
first set of contacts;
wherein contacts having a function configured in the first configuration
are not arranged with contacts having a corresponding function
configured in the second configuration, and wherein the set of
contacts of the first configuration and the second configuration
have a substantially similar size.

7. (Twice Amended) An apparatus, comprising:
an integrated circuit including a set of contacts, wherein the integrated circuit set
of contacts is suitable for operation in a first configuration, the first
configuration having an arrangement of contacts and corresponding
functions of arranged integrated circuit contacts;
a circuit board including a set of contacts, wherein the circuit board set of
contacts is suitable for operation in a second configuration, the second
configuration having an arrangement of contacts and corresponding
functions of arranged circuit board contacts, wherein the contacts of the
second configuration are situated to correspond to the contacts of the first
configuration of the integrated circuit, and arrangement of functions of
the contacts of the second configuration does not correspond to

arrangement of functions of the contacts of the first configuration; and
a converter device disposed between the integrated circuit and the circuit board,
wherein the converter board includes

a first set of contacts suitable for contacting the integrated circuit
having the first configuration, and

a second set of contacts suitable for contacting the circuit board
having the second configuration, wherein the first set of
contacts is communicatively coupled to the second set of
contacts and wherein contacts having a function
configured in the first configuration are not arranged with
contacts having a corresponding function configured in the
second configuration.

14. (Twice Amended) An apparatus, comprising:

an integrated circuit including a set of contacts, wherein the integrated circuit set
of contacts is suitable for operation in a first configuration, the first
configuration having an arrangement of contacts and corresponding
functions of arranged integrated circuit contacts;

a circuit board including a set of contacts, wherein the circuit board set of
contacts is suitable for operation in a second configuration, the second
configuration having an arrangement of contacts and corresponding
functions of arranged circuit board contacts, wherein the contacts of the
second configuration are situated to correspond to the contacts of the first
configuration of the integrated circuit, and arrangement of functions of
the contacts of the second configuration does not correspond to
arrangement of functions of the contacts of the first configuration; and

a converter device disposed between the integrated circuit and the circuit board,
wherein the converter device includes a first set of contacts suitable for
contacting the integrated circuit having the first configuration and a
second set of contacts suitable for contacting the circuit board having the

second configuration, the first set of contacts electrically coupled to the second set of contacts, wherein contacts having a function configured in the first configuration are not arranged with contacts having a corresponding function configured in the second configuration.